

Toxocariasis

Provider Fact Sheet

Toxocariasis is a parasitic disease in humans caused by infection with *Toxocara canis* or *Toxocara cati*, a roundworm found in dogs or cats.

Where is toxocariasis found?

Toxocariasis is found throughout the world, where dogs or cats and humans live in the same environment.

Who is at risk?

Anyone can be infected with toxocariasis but some are at higher risk, including:

- Children
- People who accidentally ingest dirt
- People who own a dog or cat

How is the disease transmitted?

- Dogs and cats that are infected with *Toxocara* can shed *Toxocara* eggs in their feces
- Once in the environment, it takes 2 to 4 weeks for *Toxocara* larvae to develop and for the eggs to become infectious
- Humans become infected by ingesting infectious eggs usually found in contaminated soil
- Although rare, people can also become infected by eating undercooked or raw meat from an animal infected with *Toxocara* larvae

What are the clinical manifestations?

Asymptomatic or covert disease

- Many infections are asymptomatic

Visceral toxocariasis (visceral larva migrans)

- Larvae may migrate through the liver, lungs, or other internal organs
- Rarely may involve the central nervous system (CNS) causing meningoencephalitis
- Symptoms and signs include fever, cough, wheezing, abdominal pain, or hepatomegaly
- Eosinophilia is often present

Ocular toxocariasis (ocular larva migrans)

- Larvae may migrate through the bloodstream to the eye, which is usually unilateral
- Symptoms and signs include vision loss, eye inflammation, and damage to the retina or the posterior part of the eye

Diagnosing toxocariasis

- Diagnosis is based on the presence of symptoms and signs and a history of exposure.
- Serologic testing for antibody to the *Toxocara* parasite is available. Note: Positive serological results should be interpreted with caution, as a positive test may indicate past infection or asymptomatic infection.
- Patients with ocular disease should be referred to an ophthalmologist.

Treatment of toxocariasis

- Albendazole or mebendazole are indicated for treatment of visceral disease. A five day treatment course is generally considered sufficient although there is a lack of data regarding treatment duration
- Antiparasitic drugs, steroids, and/or ophthalmologic surgery may be utilized for treatment of ocular toxocariasis

Prevention of toxocariasis

Toxocariasis is a preventable disease. Healthcare providers should counsel patients on prevention strategies, including:

- Encouraging hand washing after handling pet waste or playing outdoors
- Avoiding ingesting dirt
- Covering sandboxes and restricting animal access to play areas
- Disposing of pet feces promptly
- Pet owners should seek routine veterinarian care for their animals including deworming

For more information, please visit www.cdc.gov/parasites/toxocariasis and click "Resources for Health professionals" or contact the Parasitic Diseases Branch Public Inquiries desk at 404-718-4745, or parasites@cdc.gov.

